receive 2 hours of direct morning light coupled with misting. I reuse the same water by catching it in a 12 quart wastepaper basket seated underneath the pot. The pots sit on a plastic saucer that have holes burned into them with a red-hot screw driver. This works out well, for at the end of the day I empty the water back into the one quart jars and put them into the refrigerator overnight. By morning, the 12 quarts of rainwater are at the desired temperature of 45-50 degrees F.

I use an aquarium thermometer to measure the moss temperature inside the pot. The readings fluctuate between 50-55 degrees after flushing and then they gradually go back up to around 60-70 degrees about 4 hours later. These measurements are taken on a sunny day with air temperatures of 90-95 degrees. I feel that the Darlingtonias tolerate a much higher temperature at the roots than we realize. Mr. Powell only waters once a day even when his temperature of the day is 95 degrees and his plants are healthy and strong.

I like to thank all those who wrote to me about my *D. petiolaris* article and my concern for bog wildlife. A few additional notes on *D. petiolaris* follow. First, I noticed a movement of the leaf blade and tentacles when feeding small fruit flies or bits of tubiflex worms. Secondly, it's best to use distilled water and not mineral spring water for obvious reasons. Also, a clean razor blade is preferred over scissors to make cuts, since scissors tend to crush plant tissue causing rot to set in. The woolly sundew should not be disturbed too often with dividing but should be allowed to clump. Young plants with new growth crowns will produce normal leaves and traps but older plants seem to have less vigor and grow without traps until they are divided.

I have found that a garlic natural non-toxic spray works well on ridding Sarracenias of aphis. Crush one bulb of garlic (skin and everything), add two cups of rain or distilled water, boil for 15 minutes and allow it to stand for one hour and strain. If you don't use it all, then store it in the refrigerator. There is a garlic smell for only a few days but the only precaution is to avoid getting the spray into your eyes.

I'd like to conclude here by saying it's nice to read articles and letters from young people also.

Victorian Nepentheses, American Style

by Bruce Bednar, P.O. Box 7026, Ocala, FL 32672

Thirty years before the turn of the century, growing Nepenthes became very popular among the well-to-do. Only the rich with large estates had stove houses and gardening staffs and could afford to dabble with orchids and other costly exotic plants. This upper echelon dealt with large established botanical gardens to obtain stock. At that time growing orchids was a status symbol, and growing Nepenthes put you above the orchid growers. Most Nepenthes growers were in Europe, however one stands out even today, as many of his hybrids are still very popular in collections.

James Taplin began his work with Nepenthes at Chatsworth in England, but had no success. He ended up moving to the United States, seeking a warmer climate. Taplin succeeded much beyond his expectations when working for George Such of South Amboy, New Jersey, and became the lone American Nepenthes hybridizer. It appears that Taplin made no less than five different hybrid crosses over a fifteen-year period which in those days was remarkable. The nucleus of the Such collection, which Taplin worked with, was five major plants that flowered for him: N. mirabilis, N. gracilis, N. rafflesiana, N. x hookeriana, and N. x sedinii. His three earliest crosses were late in the 1870's, mirabilis x hookeriana, sedinii x hookeriana and gracilis x domini. Clones were chosen from the offspring and named; some were very similar. Seed germination must have been poor with the gracilis x

domini cross as only one clone ever got labeled, x courtii, now extinct. Taplin himself kept no manuscript or records and did not write for publication at all. With the majority of Taplin's hybrids, the descriptions included in written material were all done by Veitch. Importantly, Veitch indicated that the plant known as N. x domini (N.sp. x rafflesiana) was thought to be a gracilis x rafflesiana hybrid by most. But Veitch personally knowing what was in cultivation, and whose collection it was in, theorized that x domini was instead a hirsuta x rafflesiana to which I totally agree, making Taplin's x courtii a gracilis x (hirsuta x rafflesiana). Much material was sent to Europe. B.S. Williams ended up with the majority of Taplin's hybrids, as they were considered superior to European forms. Williams relabeled some material in London and distributed them, so some 20 or so clones were named from each of the x hookeriana crosses, hence the problem of look-a-likes!

In the early 1880's one more cross was made between N. rafflesiana and N. x hookeriana. Again, many clones were named and distributed overseas; however, not one is accountable for today. Taplin's last triumph was a simple species cross made in the mid-1890's of N. mirabilis x N. rafflesiana (=N. x hookerae). Oddly enough, no other clones were named. Taplin did have a daughter named Emily, and two of his closest friends were Court and Outram, both of whom were honored with hybrids named after them. Unfortunately, with the turn of the century, Nepenthes' popularity died out.

The following is a list of Taplin's victorian hybrids that are still with us. Over two dozen other clones were named, and are believed to be extinct. From his N. mirabilis x N. x hookeriana; coccinea, morganiana, atro-sanguinea, paradisae, robusta, wrigleyana, and dormanniana. Of the N. x sedinii x N. x hookeriana; williamsii, superba, outramiana, and henryana.

A final note, since it has been over a century for most of Taplin's hybrids, there is no absolute way for positive identification, even though most of the surviving hybrids fit the original descriptions and/or line drawings. This for many is not enough to substantiate proper classification. Many other victorian hybrids are still available, however the major percentage of surviving hybrids are from James Taplin-may his name never be forgotten.

SOME OF TAPLIN'S EXTANT VICTORIAN HYBRIDS

Upper right — counterclockwise N. X: paradisae, williamsii, coccinea, dormanniana, atrosanguinea, hookerae, wrigleyana, outramiana (small pitcher bottom) and superba. Photo by author.

